

The object of the present invention is an interference analysis which provides in as simple and efficient a manner as possible for radio network planning in a mobile radio network comprising adaptive antennas in at least some radio cells.

Page 3, prior to line 1 insert --BRIEF DESCRIPTION OF THE DRAWINGS--;

the paragraph starting at line 1:

Further features and advantages of the invention are obtained from the subsequent description of an exemplary embodiment, referring to the drawing, in which:

- Figure 1 shows the planning process for a conventional mobile radio network as a flowchart;
- Figure 2 shows the definition of channel-dependent interference matrices for a conventional mobile radio network comprising traffic channels and control channels;
- Figure 3 shows the modeling of an adaptive antenna by a number of highly directional antennas having in each case a different antenna pattern (beam);
- Figure 4 shows the different entries for the interference between two radio cells obtained on the basis of the modeling in Figure 3;
- Figure 5 shows the calculation of the probability of interference between a cell having an adaptive antenna and a cell having a conventional antenna;
- Figure 6 shows the calculation of the probability of interference between two radio cells having in each case an adaptive antenna;
- Figure 7 shows the procedure in determining the channel-dependent matrices, taking into consideration adaptive antennas; and

Page 4, prior to line 1 insert --DETAILED DESCRIPTION OF THE
PREFERRED EMBODIMENTS--;

Page 8, after line 23, insert the following:

Thus, while there have been shown and described and pointed out fundamental novel features of the present invention as applied to a preferred embodiment thereof, it will be understood that various omissions and substitutions and changes in the form and details of the devices illustrated, and in their operation, may be made by those skilled in the art without departing from the spirit of the present invention. For example, it is expressly intended that all combinations of those elements and/or method steps which perform substantially the same function in substantially the same way to achieve the same results are within the scope of the invention. Substitutions of elements from one described embodiment to another are also fully intended and contemplated. It is also to be understood that the drawings are not necessarily drawn to scale but that they are merely conceptual in nature. It is the intention, therefore, to be limited only as indicated by the scope of the claims appended hereto."

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